

to a specified target resource on a target appliance will now be described with reference to Figure 8. First, a header is built containing the source content-type, the target appliance routing address string (obtained from the Table of Known Appliances in Figure 2), and the target content-type address string (from the Table of Resources On An Appliance in Figure 3a) (Step 805). If the destination resource needs a particular content-type converted to another content-type before receiving it, then the entry under Special Address from the Table of Special Cases in Figure 3b is used as the destination appliance routing address string instead of the entry found in the Table of Known Appliances. Next, the content is encapsulated in the header (Step 810). The mapping algorithm on the source appliance then determines, using the destination appliance routing address string and the content-type address string, the series of conversion routines necessary to transmit the content to the target resource on the target appliance (Step 812). Then the Demux algorithm on the source appliance effects the conversion of the content for transmission across the network (Step. 814). The encapsulated content is then transmitted across the network to the destination appliance (Step 815). Upon receipt of the encapsulated content, the destination appliance parses the header, identifying the source content-type and the target content-type from the information in the header (Step 820). The content-type address string identifies the targeted content-type. The mapping algorithm then determines the series of conversion routines to convert the source content-type to the target content-type (Step 825). Finally, the Demux algorithm effects the conversion of the content from the source content-type to the target content-type by executing the sequence of conversion routines determined by the mapping algorithm. (Step 830).

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*Page 17, paragraph beginning at line 15:*

In another example, the user can transmit content from a source resource located across a wide area network (WAN) to a target gateway interface, and the mapping and Demux algorithms operating on the gateway interface determine how the source content should be converted based on the appliances and resources connected to the LAN. The user on a WAN only needs to know the network address of the gateway interface. The gateway interface then determines how to best handle the arriving content from the WAN, which can be determined on-the-fly through the mapping algorithm on gateway interface or set by the home user through a pre-determined mapping (for example, the home user may want all video mapped to his computer screen). Such an example will now be described with reference to Figure 1. A user at computer 175 might choose to transmit content from the CD-ROM on his computer to the home of the person located at gateway interface 155, but the sender does not care how the content is processed once it arrives. This example is similar to that described with reference to Figure 7 above. The content is encapsulated in a header containing the target appliance routing address string, which here is the routing address string of gateway interface 155, and transmitted across LAN 195, through gateway interface 165, across WAN 160 to gateway interface 155. The mapping algorithm operating on gateway interface 155 determines the sequence of conversion routines to convert the CD-ROM content-type to an appropriate target content-type suitable for one of the appliances connected to LAN 150. Alternatively, the home user can set the mapping engine in gateway interface 155 to a predetermined mapping.

*Page 25, paragraph beginning at line 6:*

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B4      The user's ability to control the routing of content from a source resource on a source appliance to a target resource on a target appliance will now be described with reference to Figure 6. The user located at an appliance activates the switchboard, displaying the list of resources on the appliance the user is physically using and the list of other appliances on the network discovered through the discovery process as described below with reference to Figure 4 and 5 or are hard-coded by an administrator. The user then selects a source appliance, which displays the switchboard of the source appliance identified by the Browse URL stored in the table of known appliances (Step 605).

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*Page 26, paragraph beginning at line 14:*

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B5      At step 640, the user browses the source resource by accessing the web page identified in the Table Of Resources On An Appliance by the entry under Configure URL for this resource stored in the table of known appliances. The user then configures the source resource to begin transmitting the content (Step 650). For example, one embodiment of the web page for configuring a CD-ROM is shown in Figure 10d. When the web page is accessed, the controls for a CD-ROM such as play, stop, fast forward and rewind are displayed on the screen for the user to control.

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